

ATTACHMENT A

- 1. (Currently Amended) A polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.950 to 0.956 g/cm³ at 23 °C, an MFR_{190/21.6} in the range of from 1.5 to 3.5 dg/min and which comprises from 35 to 45 % by weight of a lowmolecular-mass ethylene homopolymer A; from 34 to 44 % by weight of a high-molecular-mass copolymer B made from ethylene and less than 0.1% by weight of a first 1olefin comonomer having from 4 to 8 carbon atoms, based on the weight of copolymer B; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing from 0.1 to 0.6% by weight of a second 1olefin comonomer, based on the weight of copolymer C, wherein all of the percentage data of homopolymer A, copolymer B, copolymer C are based on the total weight of the molding polyethylene composition.
- 2. (Cancelled)
- 3. (Previously Presented) The polyethylene composition as claimed in claim 1, wherein the first 1-olefin and second 1-olefin comonomers are independently selected from 1-butene, 1-pentene, 1-hexene, 1-octene, 4-methyl-1-pentene, or mixtures of these.
- 4. (Previously Presented) The polyethylene composition as claimed in claim 1, which has a viscosity number VN_{tot} of from 500 to 600 cm³/g measured to ISO/R 1191 in decalin at 135 °C.

- 5. (Previously Presented) The polyethylene composition as claimed in claim 1, which has a swell ratio in the range from 180 to 220 %, a notched impact strength (ISO) in the range from 60 to 90 kJ/m², and a stress-crack resistance (FNCT) in the range from 15 to 25 h.
- A process for producing a polyethylene 6. (Withdrawn) composition with multimodal molecular mass distribution, which has a density in the range of from 0.950 to 0.956 g/cm^3 at 23 °C, an MFR_{190/21.6} in the range of from 1.5 to 3.5 dg/min and which comprises from 35 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 34 to 44 % by weight of a high-molecular-mass copolymer B made from ethylene and less than 0.1% by weight of a first 1-olefin comonomer having from 4 to 8 carbon atoms, based on the weight of copolymer B; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing from 0.1 to 0.6% by weight of a second 1-olefin comonomer, based on the weight of copolymer C, wherein all of the percentage data of homopolymer A, copolymer B, copolymer C are based on the total weight of the molding polyethylene composition, wherein the monomers are polymerized in slurry in a temperature range of from 60 to 90 °C at a pressure in the range of from 0.15 to 1.0 MPa, and in the presence high-mileage Ziegler catalyst composed of transition metal compound and of an organoaluminum comprising conducting the process compound, polymerization in three stages, wherein the molecular mass of each polyethylene prepared in each stage is

regulated with the aid of hydrogen, thereby forming a hydrogen concentration in each stage.

- 7. (Withdrawn) The process as claimed in claim 6, wherein the hydrogen concentration in the first polymerization stage is adjusted so that a viscosity number VN_1 of the low-molecular-mass ethylene homopolymer A is in the range of from 160 to 220 cm³/g.
- 8. (Withdrawn) The process as claimed in claim 6, wherein the hydrogen concentration in the second polymerization stage is adjusted so that a viscosity number VN_2 of a mixture of polymer A and polymer B is in the range of from 230 to 320 cm³/g.
- 9. (Withdrawn) The process as claimed in claim 6, wherein the hydrogen concentration in the third polymerization stage is adjusted so that a viscosity number VN₃ of a mixture of polymer A, polymer B, and polymer C is in the range of from 500 to 600 cm³/g.
- 10. (Withdrawn) A process for producing an L-ring drum having a capacity in a range from 50 to 250 dm³ (1) from a polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.950 to 0.956 g/cm³ at 23 °C, an MFR_{190/21.6} in the range of from 1.5 to 3.5 dg/min and which comprises from 35 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 34 to 44 % by weight of a high-molecular-mass copolymer B made from ethylene and less than 0.1% by weight of a first 1-olefin comonomer having from 4 to 8 carbon atoms, based on the weight of

copolymer B; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing from 0.1 to 0.6% by weight of a second 1-olefin comonomer, based on the weight of copolymer C, wherein all of the percentage data of homopolymer A, copolymer B, copolymer C are based on the total weight of the molding polyethylene composition, the process comprising:

- (a) plasticizing the polyethylene composition in an extruder in a temperature range of from 200 to 250 °C;
- (b) extruding the product of step (a) through a die into a mold;
- (c) blowing up the product of step (b) in a blow molding apparatus, thereby forming the L-ring drum; and

solidifying the L-ring drum by cooling.